

SHORT COMMUNICATION

A NOTE ON OVULAR OUTGROWTHS IN THE SPECIES OF *STRELITZIA* AIT.

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Seeds of *Strelitzia* species have an appendage in the form of a tuft of bright orange hairs (see Fig. 1) which is commonly called an aril (Wright, 1913; Tomlinson, 1959). Maheshwari (1950) regards an aril as being a third integument; Jackson (1928) gives a similar definition. In *Strelitzia* the outgrowths arise from the funicle on one side of the ovule and from the free end of the outer integument on the other side (Fig. 2) and, consequently, do not constitute a third integument. The appendage can therefore, according to the above definition, not be regarded as an aril.

The ovular outgrowths of *Strelitzia* seem to be similar in origin to the caruncles of *Burbridgea schizoeila* and *Careya arborea* as portrayed by Maheshwari (1950) although, in the text, he defines a caruncle as "a proliferation of the integumentary cells at the micropylar region".

Kapil & Vasil (1963) comment on the vague and indiscriminate use of the term aril by several authors and define the structure as "a secondary collar-like outgrowth which develops from the funiculus and surrounds the ovule more or less completely in post fertilization stages." These authors also regard the appendages of seeds of *Hitchenia caulina*, *Zingiber macrostachyum* and *Elettaria cardamomum*, which are derived partly from the funiculus and partly from the free end of the outer integument, as arils.

In a discussion on ovular outgrowths, Eames (1961) mentions that the use of the terms aril and caruncle is inconsistent. According to this author the term aril is applied rather loosely to fleshy parts of the ovule; to proliferations of the chalaza, the integuments or part of the integuments, to outgrowths of the chalazal region, as well as to fleshy funicles as in *Magnolia* and species of *Acacia*. He concludes that as applied to the angiosperm ovule, aril is obviously merely a descriptive term. If this is the case then the use of the term aril to describe the ovular outgrowths of *Strelitzia* is justified. It does seem, however, that a clear and consistent terminology is required and that a review and classification of ovular outgrowths in general would serve a useful purpose.

Accepted for publication 9th September, 1975.



FIG. 1.
Seeds of *S. juncea*

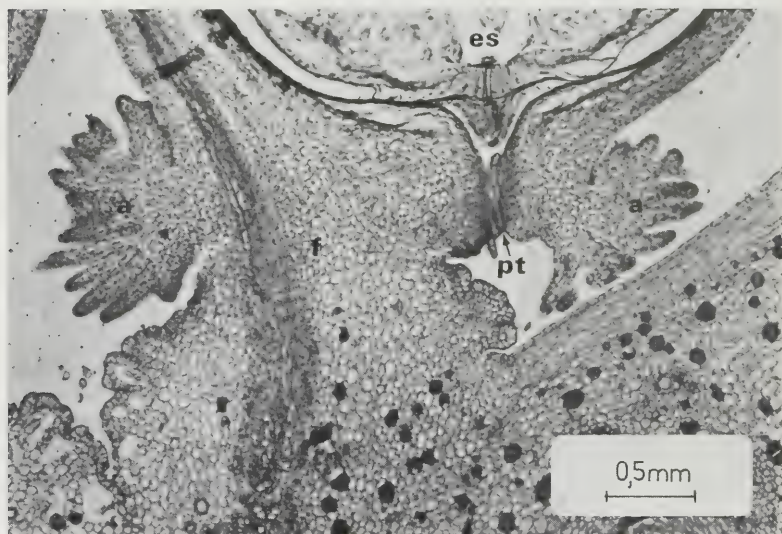


FIG. 2.
Longitudinal section of an ovule of *S. reginae* (a—aril; es—embryosac; f—funicle; pt—pollen tube in micropyle)

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